Project Proposal
for a new
INCITS Standard

SCSI Object-Based Storage Device Commands - 3
(OSD-3)

11 September 2008
1 Source of Proposed Project

1.1 Title: SCSI Object-Based Storage Device Commands - 3.

1.2 Date Submitted: 11 September 2008.

1.3 Proposing Group: INCITS TC T10. Seven T10 members are also INCITS members.

2 Process Description for the Proposed Project

2.1 Project Type: D - Development.

2.2 Type of Document: Standard.

2.3 Definitions of Concepts and Special Terms: none.

2.4 Expected Relationship with Approved Reference Models, Frameworks, Architectures, etc.
None, it is expected that this standard will be used in closed systems.

2.5 Recommended INCITS Development Technical Committee: T10.

2.6 Anticipated Frequency and Duration of Meetings
Technical Committee T10 meets on a regularly scheduled basis (see http://www.t10.org for the current meeting schedule). Specific task ad hoc groups are called as required between the regular meetings but their results are not binding.

2.7 Target Date for Initial Public Review (Milestone 4): November 2011

2.8 Estimated Useful Life of Standard or Technical Report: 5 Years.

3 Business Case for Developing the Proposed Standard or Technical Report

3.1 Description
SCSI Object-Based Storage Device Commands - 3 is the next generation of previous SCSI Object-Based Storage Device Commands - 2, following OSD-2.

The following items should be considered for inclusion in SCSI Object-Based Storage Device Commands - 3:

1) Device-to-device communications (e.g., for mirroring);
2) Data integrity enhancements; and
3) Other capabilities that may fit within the scope of this project.

3.2 Existing Practice and the Need for a Standard
The proposed project involves a compatible evolution of the present SCSI Object-Based Storage Device Commands - 2.
3.3 Implementation Impacts of the Proposed Standard

3.3.1 Development Costs
Members of T10 will provide the necessary resources. The T10 members will host the required meetings for development, provide for the necessary lab experiments, and provide the Technical Editor for the project.

3.3.2 Impact on Existing or Potential Markets
This proposed project is intended to provide a more consistent driver interface for Object-Based Storage solutions. This ensures that investments in such solutions have a stable managed migration path in the face of technological development.

3.3.3 Costs and Methods for Conformity Assessment
The committee will consider the results of testing as may be available to the committee through the voluntary efforts of the various participants in T10. With this method all costs are borne by the organizations of the various participants and have for the most part been mainly an adjunct of their normal development costs.

3.3.4 Return on Investment
ROI information is considered proprietary data by the member organizations, but members have stated that the ROI is expected to be large.

3.4 Legal Considerations

3.4.1 Patent Assertions
Calls will be made to identify assertions of patent rights in accordance with the relevant INCITS, ANSI, and ISO/IEC policies and procedures.

3.4.2 Dissemination of the Standard or Technical Report
Drafts of this document will be disseminated electronically. Dissemination of the final standard will be restricted, as the document becomes property of INCITS, ANSI, and/or ISO/IEC.

4 Related Standards Activities

4.1 Existing Standards:

<table>
<thead>
<tr>
<th>ID Number</th>
<th>Title</th>
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<tbody>
<tr>
<td>ISO/IEC 14776</td>
<td>Multipart SCSI standard</td>
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<tr>
<td>INCITS 408-2005</td>
<td>SCSI Primary Commands - 2 (SPC-3)</td>
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<tr>
<td>INCITS 405-2005</td>
<td>SCSI Block Commands - 2 (SBC-2)</td>
</tr>
<tr>
<td>INCITS 380-2003</td>
<td>SCSI Stream Commands - 2 (SSC-2)</td>
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4.2 Related Standards Activity

<table>
<thead>
<tr>
<th>ID Number</th>
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<tbody>
<tr>
<td>INCITS 447-200x</td>
<td>SCSI Architecture Model - 4 (SAM-4)</td>
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<tr>
<td>T10/2104-D</td>
<td>SCSI Architecture Model - 5 (SAM-5)</td>
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<tr>
<td>T10/1731-D</td>
<td>SCSI Primary Commands - 4 (SPC-4)</td>
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<tr>
<td>T10/1799-D</td>
<td>SCSI Block Commands - 3 (SBC-3)</td>
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<tr>
<td>T10/1611-D</td>
<td>SCSI Stream Commands - 3 (SSC-3)</td>
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4.3 Recommendations for Close Liaison
Technical Committee T11.
Storage Networking Industry Association (SNIA) OSD Technical Working Group.

5 Units of Measurement used in the Standard

The International System of Units (SI) units will be used.